

CONTRIBUTIONS FROM THE ROCKY MOUNTAIN HER-
BARIUM. VII.

AVEN NELSON.

Cypripedium Knightae, n. sp.—Stem short, 3–7^{cm} high, sparsely and coarsely villous, bearing a single pair of nearly opposite leaves at its summit: leaves oval, generally rounded and obtuse, thickish 4–7^{cm} long: peduncle glandular-viscid, 3–10^{cm} long, usually naked, rarely with a lanceolate bract near the middle: floral bracts rather large, elliptic-lanceolate: flowers 2 or 3 in a cluster, dark-purple: lower sepals united nearly to the tip, ovate-lanceolate, the two together no broader than the other sepal: petals similar, a little broader than the sepals: lip 10–12^{mm} long, somewhat shorter than the sepals and petals, the deeply infolded free margin deep-purple, the lower part of the sac ochroleucous or greenish-yellow: sterile anther elliptic, obtuse, much shorter and smaller than the large conspicuous stigma.

This species, in so far as it has been collected, has seemingly passed as *C. fasciculatum* Kellogg, Wats. Proc. Am. Acad. 17:380. That is a very different thing, as may be seen by referring to the original description, or to Howells's Fl. N. W. Am. 632. It is, moreover, of a quite different geographical range. I have great pleasure in naming this fine species for Miss Harriet Knight, whose sympathetic interest in all nature and whose intelligent activity in the educational work of Wyoming is greatly appreciated.

Collections at hand: *Miss Knight*, Medicine Bow Mts., Wyo., at Cooper Hill, July 1905 (type); *L. N. Goodding*, no. 1201, Uinta Mts., Utah (Dyer Mine), June 30, 1902; *G. E. Osterhout*, Estes Park, Colo., July 1897; and Encampment Creek, Sept. 1897.

Montia Viae, n. sp.—Annual, with fibrous roots: stems and petioles weak, suberect, 10–15^{cm} high: leaves delicately thin, pale-green; the radical several, slender-petioled, the short blades from linear to oval, acute; the single pair of cauline connate and forming a circular or slightly irregular involucre disk 10–20^{mm} broad: raceme peduncled, with a pair of green bracts at the base of the lower pedicels: flowers very small, several: sepals broadly oval, even in fruit less than 2^{mm} long: petals 5, spatulate, barely equalling the sepals,

very delicate, apparently often wholly wanting: stamens 5, very short: ovule solitary; the seed small, oval, slightly compressed and subcarinate, minutely but distinctly papillose-roughened and with a waxy conspicuous strophiole.

Most nearly related but very distinct from *M. perfoliata* (Donn.) Howell, *Erythea* 1:38, a plant of the Pacific states. Possibly all of the central Rocky Mountain specimens named *M. perfoliata* belong here. The type specimens were collected by the Misses *Dorothy Reed* and *Vie Willits*, June, 1905. Miss Willits, in whose honor the plant is named, later secured an abundance of fruiting specimens. Type locality, shady muddy banks, Big Horn, Sheridan Co., Wyoming.

Lesquerella latifolia, n. sp.—Perennial, silvered with a fine lepidote stellate pubescence throughout: stems numerous, from among the crowded rosulate crown leaves, decumbent at base, spreading, 5–15^{cm} long: radical leaves suborbicular, oval, or rhombic, sometimes broader than long, from 1–3^{cm} in diameter; the petioles slender, often much longer than the blade; cauline leaves from broadly obovate to spatulate, all cuneately tapering into a slender petiole: racemes of showy bright-yellow flowers dense, elongating in fruit: petals spatulate, 9–10^{mm} long, twice as long as the oblong sepals: siliques elliptic, very perceptibly stipitate, 5–6^{mm} long, erect on S-shaped pedicels of about the same length; style slender, 3–4^{mm} long; cells about 5-ovuled.

This is based upon Mr. L. N. Goodding's no. 625, from Karshaw, Meadow Valley Wash, southern Nevada, Apr. 26, 1902. It has been distributed as *L. montana*, a species from which it is as far removed as to characters as it is geographically.

Lesquerella Lunellii, n. sp.—Pale green, moderately and minutely stellate-pubescent throughout: caudex a mere crown surmounting the slender tap root: stems few to several, ascending or assurgent, very slender (almost filiform), 3–15^{cm} long (including the raceme): leaves narrowly linear-oblong, 1–2^{cm} long; the lower tapering into the slender petioles: raceme at length open and long for the plant: sepals purplish-green, linear-oblong, subacute, 4–5^{mm} long: the spatulate-obovate petals nearly twice as long, the upper half of the blade a fine purple, shading into the yellow of the lower half and the claw: silique globose, 4–5^{mm} in diameter; the slender

style as long and the ascending or often recurved pedicel usually distinctly longer.

Dr. *J. Lunell*, of Leeds, N. D., an enthusiastic student of the northwest flora, communicated the specimens to me. I have pleasure in naming the species in his honor. He writes: "It grows on high barren hills among rocks. Its petals are broadly purple-tipped, and the base a bright-yellow." Collected at Butte, Benson Co., N. D., June 13, 1905.

Lepidium Zionis, n. sp.—Glabrous perennial, 1–2^{dm} high: stems several from the crown of a rather thick semi-fleshy vertical root, decumbent at base but assurgent-erect, each corymbosely branched at summit: all the leaves erect, quite entire, thick or subcoriaceous, acute or apiculate; radical leaves oblong, 2–3^{cm} long, tapering to a slender petiole as long as the blade; cauline leaves very numerous, almost imbricated, linear-lanceolate, 15–25^{mm} long: racemes short, crowded: sepals elliptic, scarious margined, half as long as the obovate-cuneate white rather conspicuous petals: stamens 2: siliques ovate or elliptic, somewhat keeled, glabrous, not emarginate; the style and small stigma one-fourth as long.

This quite unusual species rests upon but one collection at present, *M. E. Jones'* no. 5411, Richfield, Utah, June 13, 1894.

Cardamine incana (Gray), n. n.—*C. cordifolia incana* Gray, Jones in Proc. Cal. Acad. Sci. II. 5:620. 1895; *C. cardiophylla* Rydb. Bull. Torr. Bot. Club 28:280. 1901; not *C. cardiophylla* Greene, Man. Bot. 19. 1894.

Euphorbia Aliceae, n. sp.—Perennial from slender horizontal rootstocks, glabrous or slightly puberulent, 10–15^{cm} high: stem branching from the base, the branches spreading-decumbent: leaves narrowly oblanceolate, short-petioled, sharply serrate, opposite, more crowded toward the terminal clustered involucre: involucre nearly sessile, small, turbinate, somewhat fimbriate-margined; the glands about 4, small, short-stipitate, sometimes minutely cornuate or even obscurely appendaged: capsule glabrous: seeds subcubical, with a caruncle, slightly tuberculate, ashy.

Known as yet only from Hartville, Wyoming, no. 549, collected July 15, 1894. Named in honor of Mrs. *Celia Alice Nelson*, whose industry as a collector is responsible for thousands of specimens found in the leading herbaria, although her name has never appeared on a plant label.

Delphinium Cockerelli, n. sp.—Tawny-pubescent on stems and in the inflorescence, densely and viscidly so above; the leaves obscurely pubescent: stems nearly simple or bushy-branched, 6–12^{dm} high: leaves large, often 12–18^{cm} in diameter, the veins strikingly superficial, about 5-cleft or parted into broadly oblong or oblong-cuneate divisions, these merely coarsely toothed or incised above the middle: racemes often several, open, with rather long peduncles and pedicels and few flowers (5–10): flowers bright-purple, large (3–4^{cm} long): sepals oblong-lanceolate, acute, about as long as the thick curved spur: petals small; the upper yellowish-white, concealed within the upper sepal; the lower purple, with suborbicular blade, cleft and sparsely hirsute ciliate.

An unusually handsome species, with somewhat the aspect of *A. subalpinum* (Gray) A. Nels. Bull. Torr. Bot. Club 27:263. The type was collected by Mrs. O. St. John, no. 90, Baldy Mts., Elizabethtown, N. M., Oct., 1898. It was communicated to me by Professor Cockerell, who called my attention to some of its distinguishing characters. *C. F. Baker's* no. 325, near Pagosa Peak, Colo., is also quite typical.

Aconitum lutescens, n. sp.—Root small, fusiform-tuberous: stems slender, simple, erect, only 3–6^{dm} high, glabrous nearly to the inflorescence: leaves 3–5^{cm} broad; the 5 broadly cuneate divisions deeply and incisely toothed above the middle: raceme narrow, long for the plant, rather open; the flowers a pure cream-color, becoming nearly white or pinkish in drying; rachis and pedicels softly hirsute-ciliate with straight viscid hairs standing out at right angles.

This *Aconitum* with its fine cream-colored flowers may best stand as a species. Collections of it are as follows: *Aven Nelson*, no. 1521 (type), Cummins, Wyo., July 1895; *T. D. A. Cockerell*, no. 87, Beulah, N. M., 1898; *W. S. Cooper*, no. 274, Estes Park, Colo., July 1904.

Anemone zephyra, n. sp.—Green but sparsely long-pilose: stems one or more from the thick erect caudex, 7–15^{cm} high, rather stout: basal leaves petioled, ternate, the broad petiolulate segments in turn deeply incised into linear-oblong lobes; involucral leaves sessile, with linear-oblong lobes: flowers large, 2–3^{cm} broad, lemon-yellow or ochroleucous, usually solitary and rather long-pedunculate, sometimes umbellately 2–4-flowered: achenes large, glabrous, obovate, tapering to a stipe-like base, tipped with the short hooked style.

There seems to be no good reason for continuing the name *A. narcissiflora* for this plant of the central Rocky Mountains. That Arctic species is white-flowered, the flowers very closely umbelled in the involucre, and the leaves are cleft into many more lobes than ours. The proposed species probably includes all the specimens from the Rocky Mountains of the United States distributed as *A. narcissiflora* or *A. albomerus* (ined.).

Anemone stylosa, n. sp.—Low from a thickened simple or branched caudex densely covered with the dead sheathing petioles: basal leaves pale green, glabrous, biternate, segments 3-parted, again incised into linear-lanceolate acute lobes; involucral leaves short-petioled, otherwise quite similar: stems and petioles sparsely long-pilose, the hairs spreading or refracted: sepals oval or oblong, purplish red or greenish red: achenes pubescent, with rather long straight glabrous persistent styles hooked at the tip.

This I take it is the plant referred to *A. tetonensis* in Syn. Fl. N. A. 1:10. As yet reported only from type locality, Fish Lake, Utah, *M. E. Jones*, nos. 5763 and 5764, Aug. 7, 1894.

Clematis plattensis, n. sp.—Stems clustered on the crown of a thick woody root, 12–18^{cm} high, terminated by the single stout peduncle of nearly equal length in fruit, sparsely short-villous: basal leaves small, scale-like and entire: foliage proper of about 3 pairs of nearly simply pinnate short-petioled leaves; pinnae 7–9, the lowest pair sometimes ternate, all distinctly petiolulate (petiolule 3–10^{mm} long) and long-villous: achenes long-tailed, hairy-plumose: flowers not known, presumably much like those of *C. Douglasii*.

Type from the North Platte Cañon, in eastern Wyoming, *Aven Nelson*, no. 8355, July 2, 1901.

RANUNCULUS JOVIS A. Nels. Bull. Torr. Bot. Club 27:261. 1900.

This it turns out is *R. digitatus* Hook., an untenable name, as it is antedated by *R. digitatus* Willd. *R. Jovis* will therefore have to stand for Hooker's plant.

Ranunculus platyphyllus (Gray), n. n.—*R. orthorhynchus platyphyllus* Gray, Proc. Am. Acad. 21:377. 1886; *R. maximus* Greene, Bull. Torr. Bot. Club 14:118. 1887.

There seems to be no good reason why Dr. Gray's name should have been rejected.

Saxifraga oregonensis (Raf.) n. n.—Diminutive perennials from a slender caudex: stems simple, 3–8^{cm} high, glandular-pubescent: the

leaves small, mostly basal, oblong-spatulate, minutely hispid-ciliate: flowers few, in a crowded glomerule at summit: calyx minutely glandular-pubescent, its whole tube adnate to the carpels: petals broadly obovate-cuneate, truncately rounded at summit, twice as long as the calyx lobes, distinctly divergently 3-nerved: the distended subglobose calyx-tube papillose-rugose from the pressure upon it by the numerous brown seeds within.

This is the rare and troublesome little alpine plant of the middle Rocky Mountains which has been referred to *S. adscendens* L., an arctic plant from which it seems to be distinct. The other names which it has also borne are *S. petraea* L. and *S. controversa* Sternb., both of which seem to refer to *S. adscendens* L., and are furthermore both encumbered by synonyms through their application to other very distinct species. Therefore it seems best to take up Rafinesque's name, under *Ponista* (*P. oregonensis* Raf. Fl. Tellur. 2:66. 1836), as there can be no doubt as to its application to our plants.

SAXIFRAGA SUBAPETALA normalis, n. var.—Very similar to the species, but petals evident, elliptic-spatulate, as long as the calyx-lobes: as in the species the carpels are immersed in a crest-margined disk which persists at the middle of the mature carpels as an undulate ridge.

For the description of the species see *Erythea* 7:169. 1899. This has been distributed by various collectors either as *S. integrifolia* or as *S. Sierrae*, from both of which it is quite distinct.

Parthenocissus laciniata (Planch.), n. comb.—*P. quinquefolia laciniata* Planch. in DC. Mon. Phan. 5:449. 1887; *P. vitacea* (Knerr) A. S. Hitch., Sp. Fl. Man. 26. 1894.

Prunus ignotus, n. sp.—Shrubby or possibly becoming tree-like: branches slender, none of them becoming indurated or thorny: leaves glabrous from the first, simply and sharply serrate: flowers white, appearing with or after the leaves, solitary or 2-3 in a cluster: calyx turbinate; its lobes entire, glabrous within and nearly so without: petals obovate: fruit not known.

It is a little singular that no one has reported this in fruit, but the fine specimens distributed by Prof. C. S. Crandall, as *P. pennsylvanica*, from the banks of the Cache la Poudre, near Ft. Collins, Colo., May 1897, cannot well be ignored.

Philadelphus intermedius, n. sp.—A low branching shrub with dark green glabrous aspect: leaves short petiolate or sessile,

broadly oval to ovate, rounded at base and either subacute or obtuse at apex, entire, glabrous or with some scattering ciliate hairs closely ciliate on the margins with short incurved hairs, 15–25^{mm} long: flowers medium size, a 3-flowered cyme from the terminal pair of leaves, a pair of flowers in the next pair of leaves, and sometimes another pair in the axils of the next lower pair of leaves—thus all the flowers except the terminal one are foliose-bracted: calyx glabrous, its lobes finely pubescent within: petals oval, about 12^{mm} long: stamens 30 or more: styles united for two-thirds of their length, the free portion as long as the abruptly enlarged stigmatic portion.

This is most nearly allied to *P. Lewisii* Pursh, from which its smaller size, smaller leaves, smaller flowers, and peculiar stigmas distinguish it. In *P. Lewisii* the styles are united throughout, the stigmatic portion as long as the style proper, the stigmatic line being broad and capping the summit of the stigma and then extending down to the styles in a narrowing line. *P. intermedius* seems to be a connecting species between the desert species of Utah and Colorado and those larger forms of the humid northwest.

Philadelphus nitidus, n. sp.—Slenderly and divaricately branched: leaves rather few, shining and with glaucous hue on both sides, nearly glabrous above, minutely appressed strigose below, mostly narrowly lance-oblong, subacute at both ends, very short petioled, 1–2^{cm} long: flowers generally solitary at the ends of the branchlets: calyx cleft below the middle, hirsute on the outside, soft pubescent on the inside of the lobes: petals elliptic, entire, 8–10^{mm} long, twice as long as the calyx lobes: stamens 30–40: styles distinct down to the ovary: stigmas short, slightly geniculate at junction with filament.

The following collections of this species are at hand: *H. N. Wheeler*, no. 425 (type), Sapinero, Colo., 1898; *C. F. Baker*, no. 266, Black Cañon, Colo., June 27, 1901; *M. E. Jones*, no. 6303, Belknap, Utah, June 28, 1899.

LARAMIE, WYOMING.